

Without conceding the correctness of the Examiner's rejection, claim 10 has been amended to recite a method for identifying a candidate compound for treating a neuropsychiatric or neurodevelopmental disorder, comprising (i) contacting a reconstituted system for measuring the interaction of a presenilin associated membrane protein (PAMP) and a PAMP substrate comprising (a) a PAMP, or a functional fragment thereof, and (b) a PAMP substrate, with a test compound, and (ii) detecting a difference in the interaction of a PAMP and a PAMP substrate in the presence of the compound compared to the interaction of a PAMP and a PAMP substrate in the absence of the compound, wherein a decrease in the interaction of a PAMP and a PAMP substrate identifies the candidate compound.

The present amendments are believed to address and overcome the Examiner's rejection of the present claims for failing to clearly define the function of a PAMP and clearly describe how the presently claimed method could be used to identify a useful compound.

Additionally, applicants' address the Examiner's assertion that it is not clear how a difference in PAMP activity correlates with a compound useful for treating a neuropsychiatric or neurodevelopmental disease. Applicants respectfully submit that the specification clearly describes the correlation between the interaction of a PAMP and a PAMP substrate and a neuropsychiatric or neurodevelopmental disease, and how compounds which modulate the interaction of a PAMP and a PAMP substrate may be useful in treating such diseases. See, e.g., page 5, lines 14-17, page 6, line 20 through page 7, line 2, and page 42, lines 17-28. In addition to the above noted description, applicants have provided a working example that establishes the correlation between the interaction of a PAMP and a PAMP substrate and the secretion of A β , which has been implicated in neuropsychiatric and neurodevelopmental diseases. See, page 45, lines 18-25.

Therefore, in view of the present amendments and remarks, applicants' submit that the present claims are clear and unambiguous and respectfully request withdrawal of the rejection.

(b) Rejections Under 35 U.S.C. § 112, first paragraph

The Examiner has further rejected claims 10, 11 and 17-23 for allegedly failing meet the written description requirement. Specifically, the Examiner maintains that the specification does

not describe PAMP proteins having at least 90% identity to SEQ ID NO: 14, 16 or 18 as having the recited activity. Applicants respectfully traverse the present rejection.

Without conceding the correctness of the Examiner's rejection, claim 10 has been amended. In view of the present amendment of claim 10, applicants' submit that one of ordinary skill would readily appreciate that the applicants were in possession of the claimed subject matter at the time the application was filed. The specification describes the term "PAMP" at great lengths (see, e.g., page 6, line 15-page 10, line 5) and provides sequence listings of several different PAMPs that fall within the scope of the claimed invention (see, e.g., SEQ ID NO: 14, 16 and 18 and Example 2, page 43). Additionally, applicants have provided several working examples which demonstrate several different embodiments of PAMP. See, e.g., page 43, line 20 to page 45, line 25.

In view of the recitation of specific sequence listings in the claims, extensive description of PAMP in the specification, and several working examples of various embodiments of PAMP, it is difficult to see how the specification fails to convey to one of ordinary skill in the art that the applicants were in possession of the presently claimed invention. Therefore, applicants submit that the present rejection is unwarranted and respectfully request that it be withdrawn.

